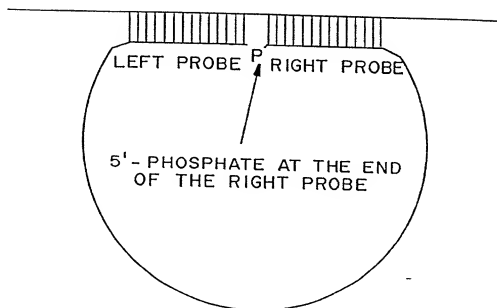


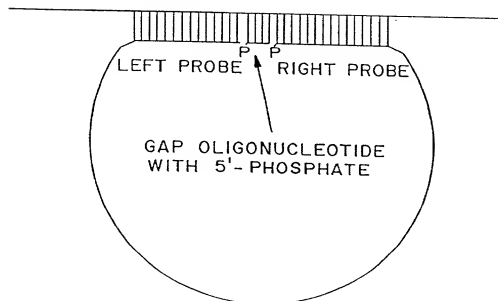
SINGLE-STRANDED TARGET



OPEN CIRCLE PROBE

FIG. 1

SINGLE-STRANDED TARGET



OPEN CIRCLE PROBE

FIG. 2

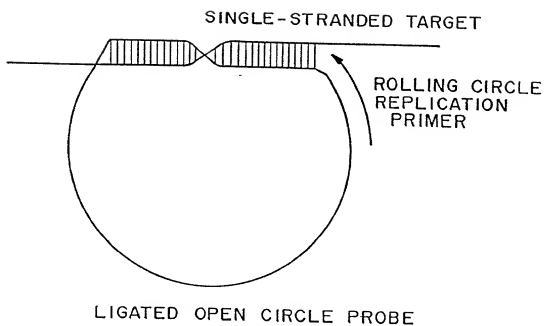


FIG. 3

ROLLING CIRCLE AMPLIFICATION

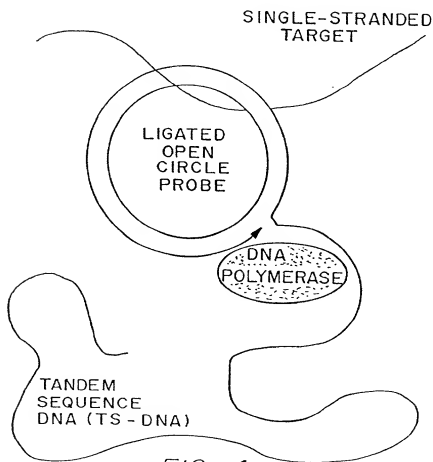
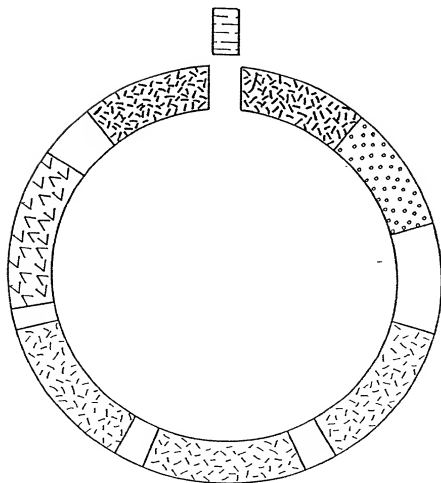


FIG. 4

OPEN CIRCLE PROBE



= TARGET PROBE (LEFT AND RIGHT
TARGET PROBES)



= PROMOTER



= PRIMER COMPLEMENT



= DETECTION TAGS (OR SECONDARY
TARGETS)



= GAP OLIGONUCLEOTIDE

FIG. 5

ADDRESS PROBE HYBRIDIZING TO TS-DNA PORTION
BRIDGING GAP OLIGONUCLEOTIDE AND TARGET PROBE ENDS

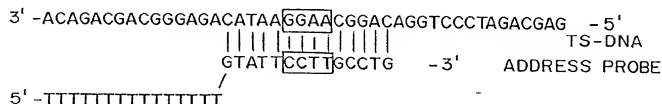
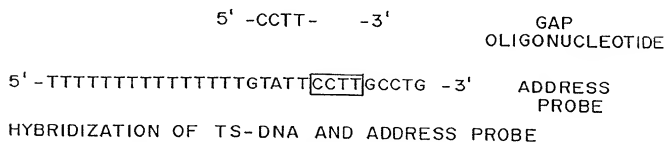


FIG. 6

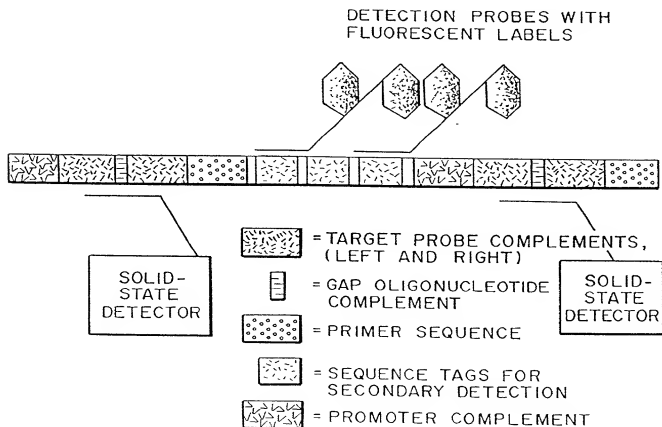


FIG. 7

LM-RCA FOLLOWED BY TRANSCRIPTION

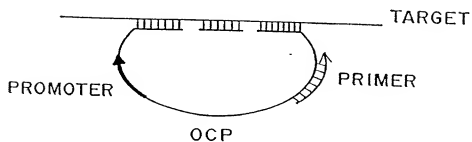
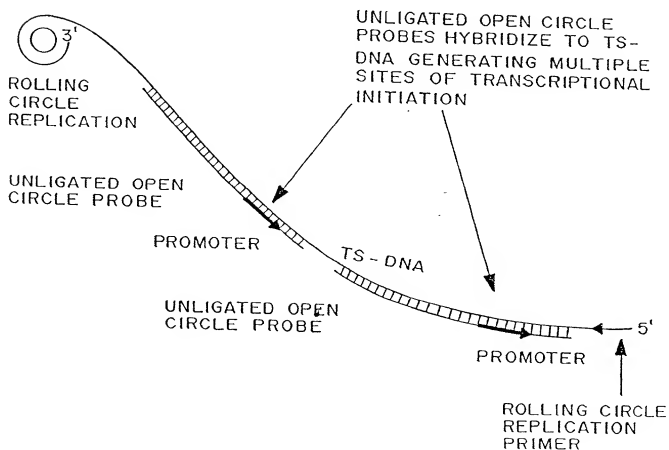


FIG. 8



ASSAY

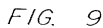
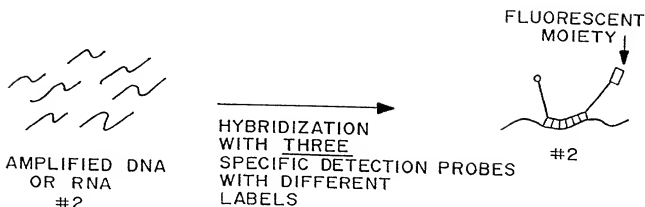


FIG. 10

DETECTION EXAMPLE



DETECTION EXAMPLE

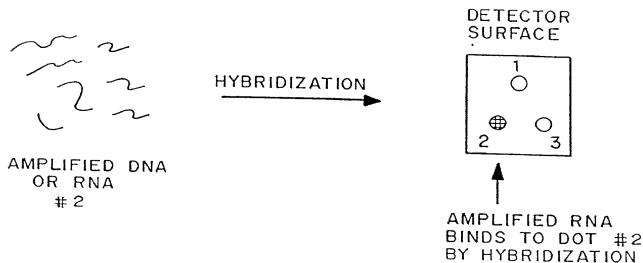
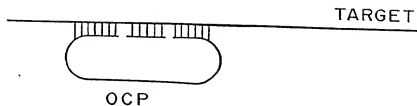
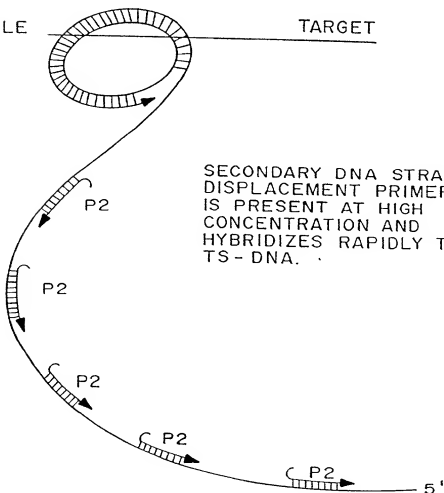


FIG. 11a

LIGATION



ROLLING CIRCLE REPLICATION



SECONDARY DNA STRAND
DISPLACEMENT PRIMER (P2)
IS PRESENT AT HIGH
CONCENTRATION AND
HYBRIDIZES RAPIDLY TO
TS-DNA.

FIG. 11b

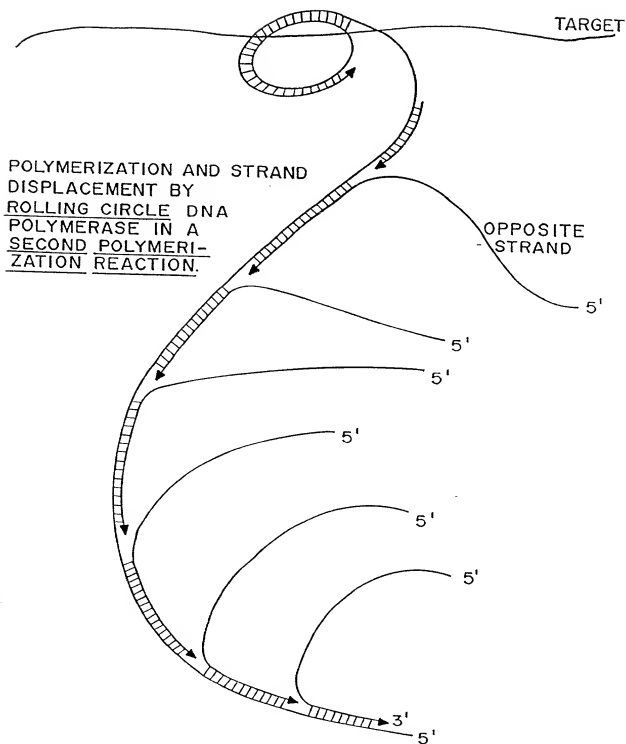
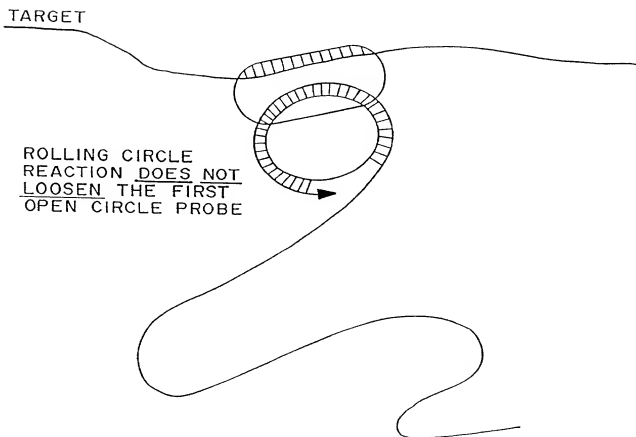
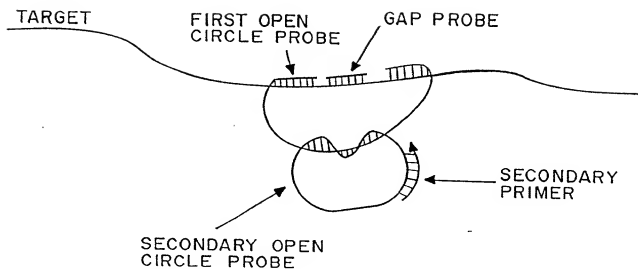


FIG. 12



STRAND DISPLACEMENT CASCADE REACTION

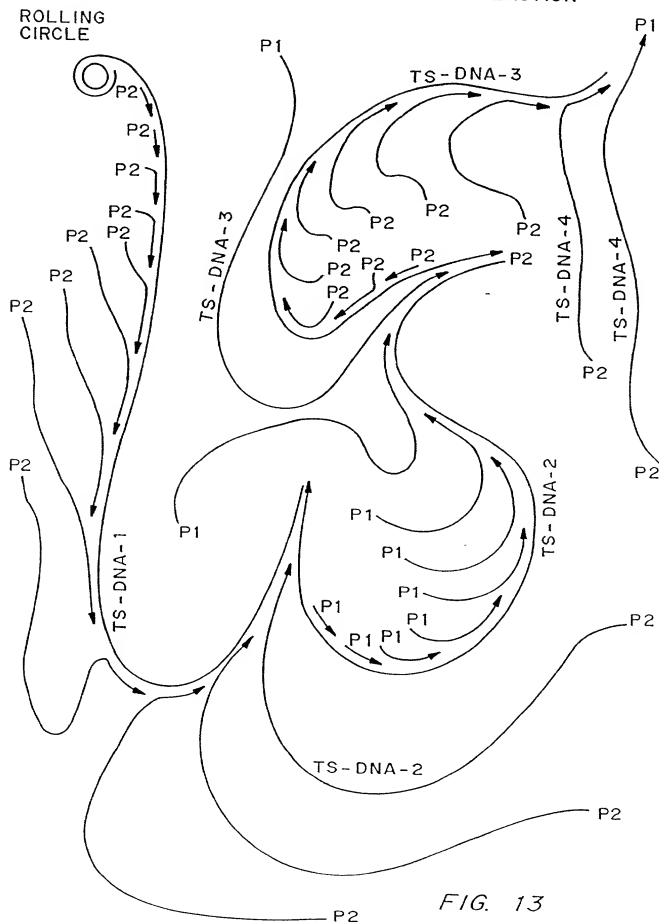


FIG. 13

OPPOSITE STRAND AMPLIFICATION

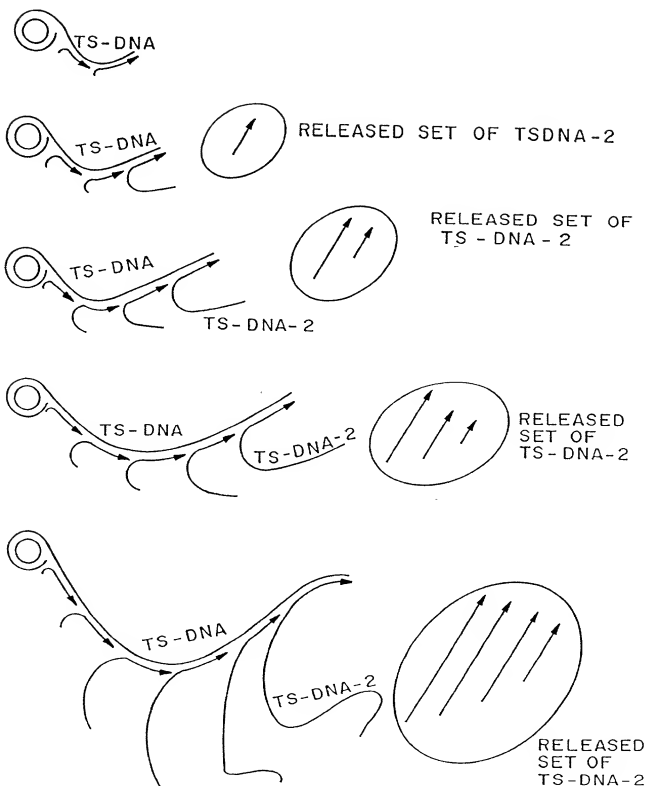


FIG. 14